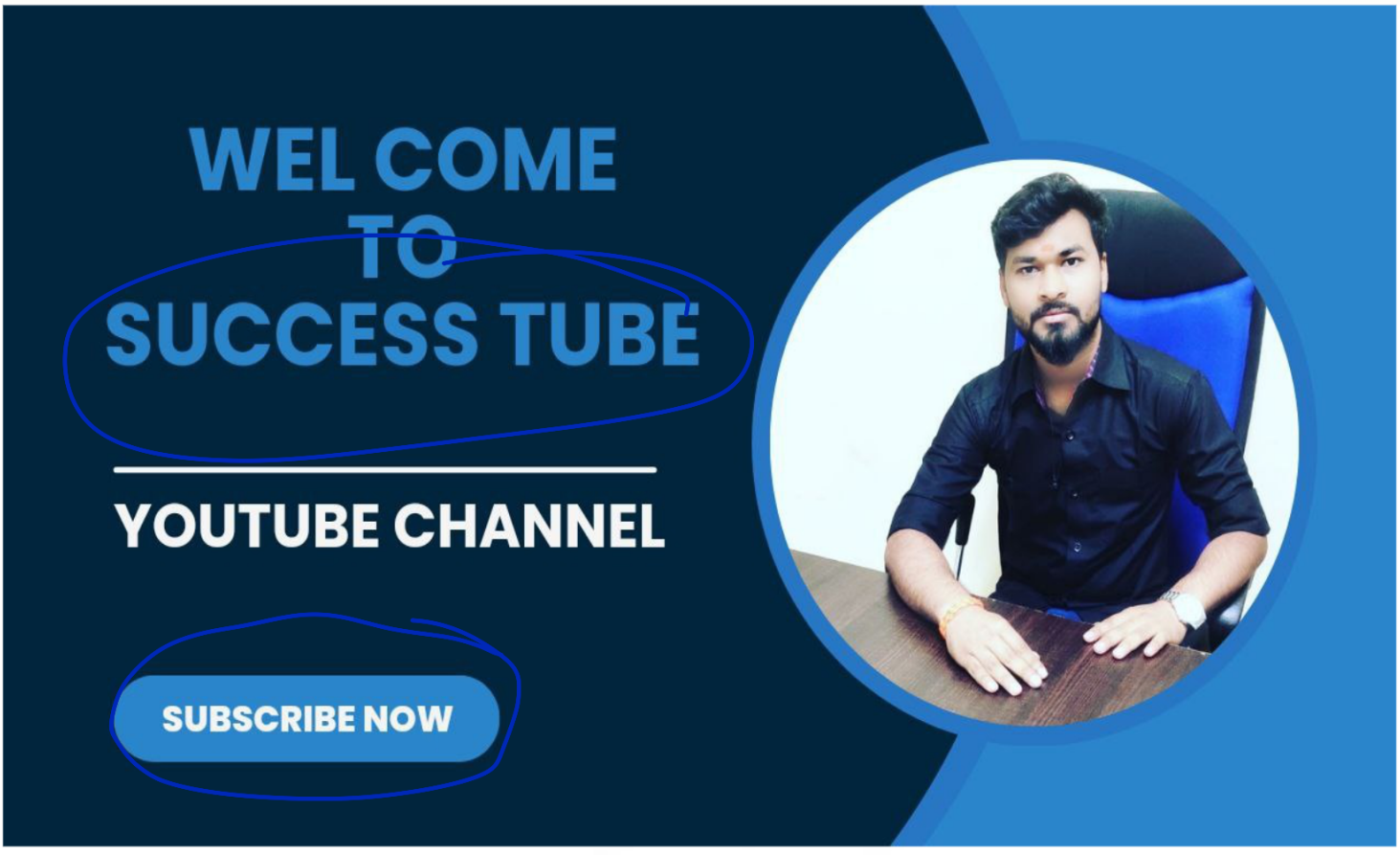

LCM and HCF

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PART : 2

Q. 1] What is the smallest number which divided by 4, 6, 10 and 15 gives remainder 3 in each case?

4, 6, 10 ಮತ್ತು 15 ರಿಂದ ಭಾಗಿಸಿದ ಚಿಕ್ಕ ಸಂಖ್ಯೆ ಯಾವುದು ಪ್ರತಿ ಸಂದರ್ಭದಲ್ಲಿ ಶೇಷ 3 ನೀಡುವ ಆ ಸಂಖ್ಯೆ ಯಾವುದು???

1. 58
2. 126
3. 37
4. 63

2	4, 6, 10, 15
2	2, 3, 5, 15
3	1, 3, 5, 15
5	1, 1, 5, 5
	1, 1, 1, 1

$= 60$

LCM = 60

$60 + 3$

$= 63$

// Q. 2] Find the HCF of $a^3b^3c^3$, $a^2b^2c^2$, abc and a^2bc

$a^3b^3c^3$, $a^2b^2c^2$, abc ಮತ್ತು a^2bc ಮ ಸಾ ಅ ಕಂಡು ಹಿಡಿಯಿರಿ.

1. $a^4b^4c^4$
2. $a^3b^3c^3$
3. $a^2b^2c^2$
4. abc ✓

$a^3b^3c^3$, $a^2b^2c^2$, abc, a^2bc

abc

Ans = abc

Success Tube

// Q. 3] Find the HCF of $(5^3\times4^3)$,$(3^5\times5^2\times4^4)$ and $(3^2\times5\times4^3)$

1. 340
2. 328
3. 230
4. 320 ✓

$= (5^3\times4^3)(3^5\times5^2\times4^4)(3^2\times5\times4^3)$

$5^1\times4^3$

$= 5\times4\times4\times4$

5×64

$= 320$ ✓

2

Success Tube

Q. 4) What is the HCF of 156, 312, 195 ?

2019
NTPC

1. 78
2. 3
3. 13
4. 39 ✓

	156, 312, 195
×3	52, 104, 65
13	4, 8, (5)

HCF = 39

Q. 5] find the largest possible length that can be used to measure the length of 2m 76cm, 5m 52cm, 11m 96cm.
2m 76cm, 5m 52cm, 11m 96cm ಉದ್ದವನ್ನು ಅಳೆಯಲು ಬಳಸಬಹುದಾದ ದೊಡ್ಡ ಸಂಭವನೀಯ ಉದ್ದವನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

1. 92cm ✓
2. 11.96cm
3. 92m
4. 1196cm

1m = 100cm

2m 76 = 2×100+76 = 276 cm
5m 52cm = 5×100+52 = 552 cm
11m 96cm = 11×100+96 = 1196 cm

	276, 552, 1196
2	138, 276, 598
×2	69, 138, 299
23	3, 6, (13)

2×2×23
= 92cm

Q. 6] Find the largest four digit number which divided by 8, 12 and 16, gives remainder 2.

8, 12 ಮತ್ತು 16 ರಿಂದ ಭಾಗಿಸಿ 2 ಶೇಷ ಅನ್ನು ನೀಡುವ ದೊಡ್ಡ ನಾಲ್ಕು ಅಂಕಿಯ ಸಂಖ್ಯೆಯನ್ನು ಕಂಡುಹಿಡಿಯಿರಿ.

1. 9984
2. 9985
3. 9986 ✓
4. 9987

4 ಅಂಕಿಯ ದೊಡ್ಡ ಸಂಖ್ಯೆ = 9999

2	8, 12, 16
2	4, 6, 8
2	2, 3, 4
2	1, 3, 2
3	1, 3, 1
	1, 1, 1

= 48

48) 9999 (208
96

0399
384

015

48 × 6 = 288, 48 × 8 = 384

48 × 9 = 432

= 9999 − 15

= 9984

= 9984 + 2

= 9986 //

Q. 7] What is the HCF of 34/9, 85/18, and 68/45.

1. 17/45
2. 34/9
3. 17/90 ✓
4. 1/90

$\frac{34}{9}, \frac{85}{18}, \frac{68}{45}$ − HCF

$\frac{34}{9}, \frac{85}{18}, \frac{68}{45}$ → LCm

$= \frac{17}{90}$ ✓

17	34, 85, 68
	2, 5, 4

3	9, 18, 45
3	3, 6, 15
2	1, 2, 5
5	1, 1, 5
	1, 1, 1

90

// Q. 8] Find the LCM of 2/3, 6/7.

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1. 6 ✓
2. 6/21
3. 12/21
4. 2/21

$\frac{2}{3}, \frac{6}{7}$ — LCm

— HCF =

$\frac{6}{1}$

$= 6$ //

2	2, 6.
3	1, 3
	1 1

$= 6$

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// Q. 9] Find the LCM of 1.05 and 2.1

1. 2.1 ✓
2. 0.6
3. 1.25
4. 4

1.05, 2.1

$\frac{105}{100}, \frac{21}{10}$ — $\frac{105}{10} = 10.5$

$= \frac{21}{\cancel{105}\ \cancel{100}\ 20}, \frac{21}{10} = \frac{21}{20}, \frac{21}{10} = \frac{21}{10}$

$= 2.1$ ✓

3	105, 21
7	35, 7
5	5 1
	1 1

105

10	100, 10
	10, 1

"Q. 10] Find the HCF of 0.32, 2.72, 12.8, 14.4

0.32, 2.72, 12.8, 14.4

1. 16
2. 1.6
3. 0.16 ✓
4. 2.72

$= \frac{32}{100}, \frac{272}{100}, \frac{128}{10}, \frac{144}{10}$ — HCF = — LCM =

2	32, 272, 128, 144
2	16, 136, 64, 72
2	8, 68, 32, 36
2	4, 34, 16, 18
	2, 17, 8, 9

16 ↓ இதுதான்.

$\frac{16}{100} = 0.16$

10	100, 100, 10, 10
10	10, 10, 1, 1
	1, 1, 1, 1

0.16